

Hotel / Restaurant Automation System

- **Group : 15**

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- **System description:**

The Software product to be produced is a Hotel Management System which will automate the major hotel operations. The hotel management system will have two modules, Room allocation automation and Restaurant automation. For room allocation automation we need to take care of several functionalities. Different users of the system will have different privileges/requirements based on their roles. The different roles in the system are customers, receptionist, manager, restaurant manager. The system will have authentication for each role in the system.

Customers can view available rooms of different types online or on spot and can book rooms in advance. The system will display the total cost of service based on the type of room selected and accessories. If they wish to reserve their rooms online then there will be a third party payment gateway. Receptionist will be able to update and enter data into the system. Receptionist will be able to check for availability of different rooms as per customer's desire. When a customer prepares to check out, the system will be able to generate the final bill for the customer.

Manager will have access to the database as he needs to be aware of the occupancy of rooms. Managers can also change the rate of rooms according to different occasions and festivals (there might be change in the discounted rates on festival days). The recurring customers will be given different discounts based on their frequency.

Restaurant manager will check the inventory for the availability of raw food items which are required for preparation of food items for the restaurant. The Restaurant manager will approve the order of raw food items which will be automatically generated by the system if the item count becomes less than some threshold value.

- **Development technology/platform/stack etc:**

Flutter

SQL Database

PostgreSQL

Android/iOS

Github